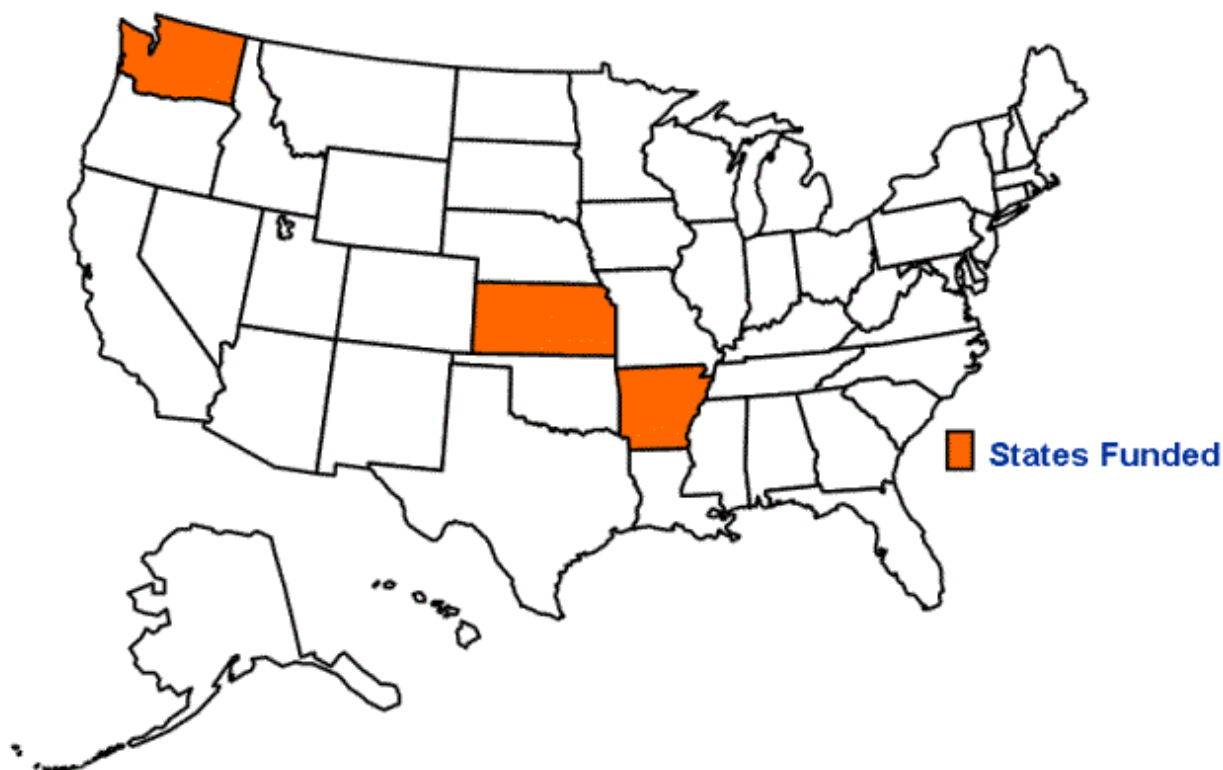


State Cardiovascular Health Examination Survey



In 2005, CDC provided funds to Arkansas, Kansas, and Washington to develop and implement a demonstration model of a state cardiovascular health examination survey. States have been encouraged to implement protocols collecting data related to monitoring the *Healthy People 2010* objectives for blood pressure and cholesterol.

Until this demonstration project was funded, data had not been collected at the state level to allow the state to monitor progress towards addressing these objectives which call for actual risk factors measurements. The purpose of this project is to develop a demonstration model to enhance the scientific capacity of a state program by implementing a state cardiovascular health examination survey; collect data on levels of blood pressure, blood cholesterol, and other relevant information; compare data between priority populations and the general public; and provide guidance to states in developing, implementing, and evaluating cardiovascular health promotion and risk factor control strategies to reduce the burden of death, disabilities, cost, and eliminate health disparities.

Information collected will include, but not be limited to measurement of lipid and lipoprotein cholesterol blood levels; blood pressure levels; anthropometric levels; information on other relevant risk factors or behaviors; history of heart diseases, stroke, and diabetes; medications prescribed and actions taken to control high blood pressure and high cholesterol; and demographic and socioeconomic information. Data will not be transmitted to CDC. CDC does not expect or encourage the grantees to combine data from the three states because each state has its own unique data collection strategy.

This project addresses the following *Healthy People 2010* objectives related to heart disease and stroke. (Source: <http://www.healthypeople.gov/Document/HTML/Volume1/12Heart.htm>)

- 12–9: Reduce the proportion of adults with high blood pressure.
- 12–10: Increase the proportion of adults with high blood pressure whose blood pressure is under control.
- 12–11: Increase the proportion of adults with high blood pressure who are taking action (for example, losing weight, increasing physical activity, or reducing sodium intake) to help control their blood pressure.
- 12–13: Reduce the mean total blood cholesterol levels among adults.
- 12–14: Reduce the proportion of adults with high total blood cholesterol levels.
- 12–16: Increase the proportion of persons with coronary heart disease who have their low density lipoprotein cholesterol level treated to a goal of less than or equal to 100 mg/dL.

Arkansas

Arkansas has the highest stroke mortality rate in the nation, and the 15th highest heart disease mortality rate. This project will implement the Arkansas Cardiovascular Health Examination Survey (ARCHES). ARCHES will collect data on levels of blood pressure and blood cholesterol and other relevant information, allow comparisons between blacks and the general public, and provide guidance to the state in developing, implementing, and evaluating cardiovascular health promotion and risk factor control strategies to eliminate health disparities.

Variables

ARCHES Questionnaire Domains

Introduction and verification
Screener (via initial phone contact)
Consent form (including for blood sample)
Socio–Demographics: Age, Gender, Ethnicity/race, Education, Income, Marital status, Employment/Occupation, HH composition (# adults/# children), Housing
Tracking and tracing information
Self–rated health
Weight history (including self reported weight and height)
Health Insurance
Hospitalization and access to care
Smoking and tobacco use
Drinking
Blood pressure knowledge/history
Cholesterol knowledge/history
Cardiovascular disease knowledge/history
Diabetes knowledge/history
Kidney disease knowledge/history
Oral/Dental health
Sleep patterns

Depression/Stress
Dietary supplements and prescription medication
Diet behavior and nutrition
Physical activity
Physical functioning (disabilities; ADL/IADL)
Selective medical conditions history
Family health history
Food Security
Social support
Reactions to race

Examinations Variables

Height and weight
Waist circumference
Blood pressure
Blood tests:
- Lipid profile (including total cholesterol, LDL, HDL)
- Fasting Glucose
- Creatinine
- High sensitivity C Reactive Protein
- Homocysteine

- Cystatin—C
- Serum creatinine
- Fasting serum insulin (on known diabetics only)
- HbA1c (on known diabetics only)
- Calcium

- PTH
- Phosphate
- Hemoglobin
- Cotinine
- Urinary albumin to creatinine ratio (ACR)

Kansas

The goal of this project is to design a model to implement a statewide survey and clinical assessment of cardiovascular health risk profiles. This study will allow the state of Kansas to gain a better insight as to the burden of cardiovascular disease (CVD) risk factors in Kansans and the level of control of those risk factors in various racial/ethnic populations in Kansas. This project will further empower local health departments to respond to the state health department for various health related initiatives. In Kansas, CVD is the leading cause of death.

Variables

Blood Variables:

- Total cholesterol
- LDL/HDL
- Triglycerides
- Blood sugar
- HbA1c

Smoking Variables

"smoked at least 100 cigarettes in the entire life"

"cigarettes smoking frequency"

"age when the respondent last smoked cigarettes"

"how long has it been since the respondent quit smoking cigarettes"

"anyone who lives in the respondent's house smoke cigarettes, cigars, or pipes anywhere inside the participant's home"

Medical History Variables

MI

angina/CHD

stroke

TIA

atrial fibrillation

deep venous thrombosis

pulmonary embolus

peripheral arterial disease

left ventricular heart hypertrophy

other heart disease

hospitalization on selected heart conditions.

Symptoms of angina

Symptoms of congestive heart failure

Symptoms of peripheral arterial disease.

Knowledge on heart attack and stroke symptoms

Personal history of blood pressure

Personal history of cholesterol

Personal history of diabetes

When the respondent was told having the condition and what actions were taken to alleviate the condition will be ascertained.

Personal history of aspirin use

Personal history of oral health

Personal history of weight and height.

Family history of blood pressure

Family history of heart attack

Family history of high cholesterol

Family history of diabetes

Female Participants – Hormonal Replacement Use

Physical Activity

Apnea

Diet and Nutrition

Social Support

Washington

The State will collect population-based data on blood pressure, lipids, and lipoproteins. The information will be used to estimate prevalence of high blood pressure and high cholesterol, measure progress in meeting *Healthy People 2010* objectives, and guide the state in developing interventions to prevent heart disease and stroke. Lab assays will be conducted by the Northwest Lipid Metabolism and Diabetes Research Laboratories, a partner in the CDC/NHLBI Lipid Standardization Program.

Data will be collected to represent the state population as well as a priority group, adults 25 years and older with annual household incomes less than \$25,000. Survey questions, measures, and protocols will be based on the BRFSS and NHANES.

Variables

Biological samples:

- HDL
- LDL
- VLDL
- Triglycerides
- glucose

Anthropometric measures

- Height
- Weight
- Waist circumference
- Blood Pressure
- Pulse
- Arcus Senilis

Interview data:

See attachment of draft interview. I don't foresee substantive changes in the interview.

Self-Administered Questionnaire
Smoking and Tobacco Questions
Stress Module
Physical Activity Questions

Food Frequency Questionnaire

Mercury Component
Hair Sample
Occupation Questions

For More Information

State Heart Disease and Stroke Prevention Program

CDC funds health departments in 32 states and the District of Columbia to develop effective strategies to reduce the burden of heart disease and stroke and their risk factors. The program stresses the need for policy and systems changes that promote heart-healthy and stroke-free living and working conditions. For more information, see www.cdc.gov/cvh/state_program/index.htm.

Healthy People 2010

The federal government's prevention agenda for building a healthier nation. There are 16 health objectives specific to heart disease and stroke, and more in areas that relate to heart disease and stroke. CDC is a co-lead agency with the National Heart, Lung, and Blood Institute for the heart disease and stroke focus area. For more information, see <http://www.cdc.gov/cvh/hp2010/index.htm>.